



Actuation & Control

Guide to selection of Saunders ES Actuators

The selection of the correct Saunders ES actuator depends on these factors:

- **Line Pressure**
The fluid pressure in the pipeline against which the actuator must close leaktight.
- **Pressure Drop**
Either 100% – when the actuator is closed and then pressure is applied or 0% – when the actuator needs to shut the valve off against the line pressure.
- **Operating Pressure**
The air-hydraulic pressure required to power the actuator.
- **Valve Size**
The nominal size of the valve body given in either mm or inches.

- **Valve Type**
Either weir type (A and AFP) or straight through (KB type) valves.
- **Diaphragm Type**
Dependent on the line media either PTFE faced or rubber diaphragms (PTFE faced diaphragms are more rigid and require higher operating pressures).

The actuator models available are outlined in the tables below in terms of valve size, valve type and diaphragm type. In order to choose the right actuator the tables below should be used in conjunction with the actuator performance graphs.

Failsafe closing actuators

(for performance graphs see data sheets 6/ACT/ES-SC04 – 06/UK/Rev 1)

FAILSAFE CLOSING ACTUATORS																	
Body Size		ES60		ES61		ES62		ES63		ES64		ES65		ES66			
mm	ins	A		KB		A		KB		A		KB		A		KB	
		R	P	R	P	R	P	R	P	R	P	R	P	R	P	R	
DN8	¼																
DN10	⅜																
DN15	½																
DN20	¾																
DN25	1																
DN32	1¼																
DN40	1½																
DN50	2																
DN65	2½																
DN80	3																
DN100	4																
DN125	5																
DN150	6																
DN200	8																
DN250	10																

Abbreviations

- ES60 Actuator model
- A A type valves (weir type)
- KB KB type valves (straight through type)
- R Rubber diaphragm
- P PTFE faced diaphragm



Failsafe opening actuators

(for performance graphs see data sheets 6/ACT/ES-SO/04 – 06/UK/Rev 1)

FAILSAFE CLOSING ACTUATORS																				
Body Size		ES67			ES68			ES69			ES70		ES71		ES72		ES73			
mm	ins	A		KB	A		KB	A		KB	A		KB	A		KB	A		KB	
		R	P	R	R	P	R	R	P	R	R	P	R	R	P	R	R	P	R	
DN8	¼																			
DN10	⅜																			
DN15	½																			
DN20	¾																			
DN25	1																			
DN32	1¼																			
DN40	1½																			
DN50	2																			
DN65	2½																			
DN80	3																			
DN100	4																			
DN125	5																			
DN150	6																			
DN200	8																			
DN250	10																			

Double acting actuators

(for performance graphs see data sheets 6/ACT/ES-SC04 – 06/UK/Rev 1)

FAILSAFE CLOSING ACTUATORS																	
Body Size		ES53			ES54			ES55			ES56		ES57		ES58		
mm	ins	A		KB	A		KB	A		KB	A		KB	A		KB	
		R	P	R	R	P	R	R	P	R	R	P	R	R	P	R	
DN8	¼																
DN10	⅜																
DN15	½																
DN20	¾																
DN25	1																
DN32	1¼																
DN40	1½																
DN50	2																
DN65	2½																
DN80	3																
DN100	4																
DN125	5																
DN150	6																
DN200	8																
DN250	10																

Abbreviations

- ES60 Actuator model
- A A type valves (weir type)
- KB KB type valves (straight through type)
- R Rubber diaphragm
- P PTFE faced diaphragm



Crane Process Flow Technologies Ltd
 Grange Road, Cwmbran, Gwent, U.K. NP44 3XX
 Tel: +44 1633 486666
 Fax: +44 1633 486777
 www.craneflow.com

Printed in the UK.

Due to constant product improvements, details shown on this data sheet are subject to change.

